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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: **Aubrey L. Helms Jr. et al.** Confirmation No.: **9309**
Serial No.: **10/519,331** Art Unit: **1762**
Filed: **April 18, 2005** Examiner: **To be assigned**
For: **Method for Energy-Assisted
Atomic Layer Deposition and
Removal** Attorney Docket No.: **067538-5148-US01**

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure provisions of 37 C.F.R. §1.56, there is hereby provided certain information which the Examiner may consider material to the examination of the subject U.S. patent application. It is requested that the Examiner make this information of record if it is deemed material to the examination of the application.

1. Enclosures accompanying this Information Disclosure Statement are:

- 1a. ☒ A list of all patents, publications, applications, or other information submitted for consideration by the office.
- 1b. A legible copy of:
- ☐ Each foreign patent;
 - ☐ Each publication or that portion which caused it to be listed on the PTO-1449;
 - ☐ For each cited pending U.S. application, the application specification including the claims, and any drawing of the application, or portion of the application which caused it to be listed on the PTO-1449 including any claims directed to that portion;
 - ☐ all other information or portion which caused it to be listed on the PTO-1449.
- 1c. ☒ An English language copy of search report(s) from a counterpart foreign application or PCT International Search Report.
- 1d. ☒ Explanations of relevancy (ATTACHMENT 1(d), hereto) or English language abstracts of the non-English language publications.

2. ☒ This Information Disclosure Statement is filed under 37 C.F.R. §1.97(b):
- ☐ Within three months of the filing date of a national application other than a continued prosecution application under §1.53(d);
 - ☐ Within three months of the date of entry of the national stage as set forth in §1.491 in an international application;
 - ☒ Before the mailing of the first Office action on the merits;
 - ☐ Before the mailing of a first Office action after the filing of a request for continued examination under §1.114.
3. ☐ This Information Disclosure Statement is filed under 37 C.F.R. §1.97(c) after the period specified in 37 C.F.R. §1.97(b), but before the mailing date of any of a final action under 37 C.F.R. §1.113, a notice of allowance under 37 C.F.R. §1.311 or an action that otherwise closes prosecution in the application.

(Check either Item 3a or 3b)

- 3a. ☐ The Certification Statement in Item 5 below is applicable. Accordingly, no fee is required.
- 3b. ☐ The \$180.00 fee set forth in 37 C.F.R. §1.17(p) in accordance with 37 C.F.R. §1.97(c) is:
- ☐ enclosed
 - ☐ to be charged to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (order no.).

(Item 3b to be checked if any reference known for more than 3 months)

4. ☐ This Information Disclosure Statement is filed under 37 C.F.R. §1.97(d) after the period specified in 37 C.F.R. §1.97(c), but on or before the date of payment of the issue fee.

(Check either Item 4a or 4b)

- 4a. ☐ The Certification Statement in Item 5 below is applicable.
- 4b. ☐ The \$180.00 fee set forth in 37 C.F.R. §1.17(p) is:
- ☐ enclosed.
 - ☐ to be charged to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (order no.).

5. ☐ Certification Statement (applicable if Item 3a or Item 4a is checked)

(Check either Item 5a, 5b or 5c)

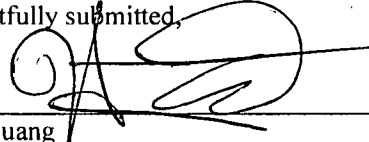
- 5a. ☐ In accordance with 37 C.F.R. §1.97(e)(1), it is certified that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
- 5b. ☐ Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart application, and the communication was not received by any individual

designated in 37 C.F.R. §1.56(c) more than thirty days prior to the filing of this information disclosure statement.

- 5c. ☐ Pursuant to 37 C.F.R. §1.704(d), each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart application, and the communication was not **received** by any individual designated in 37 C.F.R. §1.56(c) more than thirty days prior to the filing of this information disclosure statement.
6. ☒ Copies of each cited U.S. patent and each U.S. patent application publication are not enclosed pursuant to the USPTO OG Notice dated 05 August 2003 waiving the requirement under 37 C.F.R. 1.98(a)(2)(i) for U.S. patent applications filed after June 30, 2003.
7. ☐ This application is a continuation application under 37 C.F.R. §1.53(b) or (d).
(Check appropriate Items 7a, 7b and/or 7c)
- 7a. ☐ A Petition to Withdraw from issue under 37 C.F.R. §1.313(b)(5) is concurrently filed herewith.
- 7b. ☐ Copies of publications listed on Form PTO-1449 from prior application Serial No. , filed on , of which this application claims priority under 35 U.S.C. §120, are not being submitted pursuant to 37 C.F.R. §1.98(d).
- 7c. ☐ Copies of the publications listed on Form PTO-1449 were not previously cited in prior application Serial No. , filed on , and are provided herewith.
8. ☐ This is a Supplemental Information Disclosure Statement. (Check Item 8a)
- 8a. ☐ This Supplemental Information Disclosure Statement under 37 C.F.R. §1.97(f) supplements the Information Disclosure Statement filed on . A bona fide attempt was made to comply with 37 C.F.R. §1.98, but inadvertent omissions were made. These omissions have been corrected herein. Accordingly, additional time is requested so that this Supplemental Information Disclosure Statement can be considered as if properly filed on .
9. ☐ In accordance with 37 C.F.R. §1.98, a concise explanation of what is presently understood to be the relevance of each non-English language publication is:
(Check Item 9a, 9b, or 9c)
- 9a. ☐ satisfied because all non-English language publications were cited on the enclosed English language copy of the PCT International Search Report or the search report from a counterpart foreign application indicating the degree of relevance found by the foreign office.
- 9b. ☐ set forth in the application.
- 9c. ☐ enclosed as an attachment hereto.
10. ☒ The Commissioner is authorized to charge any additional fee required or credit any overpayment for this Information Disclosure Statement and/or Petition to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (order no. 067538-5148-US01).

11. ☒ No admission is made that the information cited in this Statement is, or is considered to be, material to patentability nor a representation that a search has been made (other than a search report of a foreign counterpart application or PCT International Search Report if submitted herewith). 37 C.F.R. §§1.97(g) and (h).

Respectfully submitted,



Date: August 10, 2007

60,008
(Reg. No.)

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LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

PTO 1449

ATTY DOCKET NO.

067538-5148-US01

APPLICATION NO

10/519,331

APPLICANT

Aubrey L. Helms Jr. et al.

FILING DATE

April 18, 2005

ART UNIT 1762

Confirmation no. 9309

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A01	5,294,294	03/15/1994	Namose			
	A02	6,036,876	03/14/2000	Chen et al.			
	A03	6,168,726 B1	01/02/2001	Li et al.			
	A04	6,183,563 B1	02/06/2001	Choi et al.			
	A05	6,231,672 B1	05/15/2001	Choi et al.			
	A06	6,342,277 B1	01/29/2002	Sherman			
	A07	6,548,414 B2	04/15/2003	Athavale et al.			
	A08	6,573,184 B2	06/03/2003	Park			
	A09	6,579,372 B2	06/17/2003	Park			
	A10	6,616,986 B2	09/09/2003	Sherman			
	A11	6,630,401 B2	10/07/2003	Sneh			
	A12	6,632,279 B1	10/14/2003	Ritala et al.			
	A13	6,855,485 B2	02/15/2005	Irie			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	N O
	B01	TW-387928 B	04/21/2000	Taiwan Patent Application (Abstract page only)			x (machine)	
	B02	TW-478065 B	03/01/2002	Taiwan Patent Application (Abstract page only)			x (machine)	
	B03	TW-490736 B	06/11/2002	Taiwan Patent Application (Abstract page only)			x (machine)	
	B04							
	B05							

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	C01	Taiwanese Search Report received in Taiwanese patent application no. 92117005, dated June 23, 2003
	C02	
	C03	

EXAMINER /Kelly Stouffer/

DATE CONSIDERED 11/06/2008

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.